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PATTERSON & SHERIDAN, LLP/
LUCENT TECHNOLOGIES, INC
595 SHREWSBURY AVENUE
SHREWSBURY, NJ 07702

EXAMINER	
SONI, KETAN S	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/674,123	DAS ET AL.	
	Examiner	Art Unit	
	Ketan Soni	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/1004*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

- Applicant's Amendment filed 05/31/2007 is acknowledged.
- Claims 1-21 are still pending in the present application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 5, 8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by **Yokoyama et al. (US 6324166)** in view of **Conway (US Patent # 7054308 B1).**

Consider **claim: 1** (Currently amended), Yokoyama et al. discloses assigning a decision policy to status of utilization of a particular location in a network (When a connection request is sent, CAC-connection admission control plays a crucial roll for managing and controlling traffic, col: 7, lines: 19-25); **(c)** assessing a priority level of a new voice call requesting to enter the network relative to priorities of existing calls on the network (when a fresh call arrives, priority class and call type is determined, fig: 9-A, step k,j; then compared with the number of calls which are traffic parameters, col: 7, lines: 48-55, and fig: 9-A-B); and **(d)** Invoking said decision policy on the new voice call according to its relative ' priority level to the existing calls on the network and the decision policy in effect at the time the new voice call requests entry to the network (When fresh call arrives, the call admission control is done in such a way that a fresh call is accepted if the existing calls in progress are less than the designed maximum number otherwise the fresh call is rejected, col: 8, lines: 42-45, Maximum number of new call is stored as number of calls N (k, j), then loop steps with respect to calls of classes 1 to K for new incoming calls and compared with each class. If the compared class is full, then judgment in next class is executed, col: 8, lines: 48-55) but Yokoyama et al. is generally silent about **(a)** polling at least one location in a network to obtain information indicative of a level of utilization of said at least one location and **(b)**

computing a status of utilization of said at least one location based on said polled information.

However in the same field of endeavor, Conway discloses: **(a)** polling at least one location in a network to obtain information indicative of a level of utilization of said at least one location (The method comprises the steps of periodically polling the information base for traffic statistics (based on use or operation), column: 3, lines: 20-22); **(b)** computing a status of utilization of said at least one location based on said polled information (In one embodiment of the present invention, a method for estimating the call GoS at a gateway is based upon the use of dial peer traffic statistics that can be obtained by polling the dial control management information base (MIB) (MIB is responsible for making decisions and maintains stats for dial peers), column: 4, lines: 66-68; Counters are used to calculate the capacity: In order to make use of the counters to calculate traffic statistics, the counters are polled periodically (to poll the information and defining the value for the given time) using a Simple Network Management Protocol (SNMP) based network management system. Letting CT (i, t) be defined as the value of "dialCtlPeerStats-ConnectTime" for dial peer i at a time t and SC (i, t) as the value of "dialCtlPeerStats-SuccessCalls" for dial peer i at time t, the following gateway performance parameters are then estimated using the polled values of CT (i, t) and SC (i, t): column: 5, lines: 46-50).

There for it would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate a method that uses Call Admission Control Unit as a central traffic management method to guarantee QoS requirement

with their priority class and type as disclosed by Yokoyama et al. with the method of Conway where the steps of periodically polling the information for traffic statistics, storing and using that information for estimating and monitoring traffic. The motivation is to prioritize traffic based on controlled admission for the fresh calls using their priority and network traffic or load.

Consider **claim: 2** (Original), and as applied to claim: 1 above, Yokoyama et al. as modified by Conway discloses the method of claim: 1. Further taught by combination and specifically by Yokoyama et al. wherein a first party initiating the new voice call is checked for proper authorization to initiate the new voice call (Whenever a fresh new call is arrived, call admission control starts, and a call admission control unit evaluates the new call for admission, col: 4, lines: 45, and fig: 9A).

Consider **claim: 5** (Currently Amended), Yokoyama et al. discloses assigning a decision policy to status of utilization of a particular location in a network (When a connection request is sent, CAC-connection admission control plays a crucial roll for managing and controlling traffic, col: 7, lines: 19-25); **(c)** assessing a priority level of a new voice call requesting to enter the network relative to priorities of existing calls on the network (when a fresh call arrives, priority class and call type is determined, fig: 9-A, step k,j; then compared with the number of calls which are traffic parameters, col: 7, lines: 48-55, and fig: 9-A-B); and **(d)** Invoking said decision policy on the new voice call according to its relative ' priority level to the existing calls on the network and the

decision policy in effect at the time the new voice call requests entry to the network (When fresh call arrives, the call admission control is done in such a way that a fresh call is accepted if the existing calls in progress are less than the designed maximum number otherwise the fresh call is rejected, col: 8, lines: 42-45, Maximum number of new call is stored as number of calls N (k, j), then loop steps with respect to calls of classes 1 to K for new incoming calls and compared with each class. If the compared class is full, then judgment in next dass is executed, col: 8, lines: 48-55) but Yokoyama et al. is generally silent about a computer readable medium containing a program executes instructions and **(a)** polling at least one location in a network to obtain information indicative of a level of utilization of said at least one location and **(b)** computing a status of utilization of said at least one location based on said polled information.

However in the same field of endeavor, Conway discloses a computer readable medium containing a program which, when executed, performs an operation of managing voice calls of different types of priority levels (network management system polled data file 42 is processed by a custom-developed program 43, written, for example, in Perl scripts, to provide the estimated GoS and offered traffic for each gateway as a function of the time of day, column: 8, lines: 60-62; As shown in fig: 4, the network management system 41 writes the raw data to a file 42, which is processed by a calculation program 43. The calculation program makes use of the dial peer configuration information 44, and provides the estimated grade of service for various types of priority level or services and offered traffic at each gateway at user set times at

various intervals throughout the operation, column: 8, lines: 16-22), the operation comprising: **(a)** polling at least one location in a network to obtain information indicative of a level of utilization of said at least one location (The method comprises the steps of periodically polling the information base for traffic statistics (based on use or operation), column: 3, lines: 20-22); **(b)** computing a status of utilization of said at least one location based on said polled information (In one embodiment of the present invention, a method for estimating the call GoS at a gateway is based upon the use of dial peer traffic statistics that can be obtained by polling the dial control management information base (MIB) (MIB is responsible for making decisions and maintains stats for dial peers), column: 4, lines: 66-68; Counters are used to calculate the capacity: In order to make use of the counters to calculate traffic statistics, the counters are polled periodically (to poll the information and defining the value for the given time) using a Simple Network Management Protocol (SNMP) based network management system. Letting CT (i, t) be defined as the value of "dialCtlPeerStats-ConnectTime" for dial peer i at a time t and SC (i, t) as the value of "dialCtlPeerStats-SuccessCalls" for dial peer i at time t, the following gateway performance parameters are then estimated using the polled values of CT (i, t) and SC (i, t): column: 5, lines: 46-50).

Consider **claim: 8** (New), and as applied to claim: 1 above, Yokoyama et al. as modified by Conway discloses the method of claim: 1. Further taught by combination and specifically by Conway, the method of claim 1 further comprising after step (a) but before step (b), step (al) includes polling the network to determine routing paths (dial-

peer statistics (to determine type) that are available through polling of the dial-control Management Information Base (MIB) is used for polling, column: 4, lines: 5-6; The method comprises the steps of periodically polling the information base for traffic statistics (based on use or operation), column: 3, lines: 20-22).

Consider **claim: 9** (New), and as applied to claim: 8 above, Yokoyama et al. as modified by Conway discloses the method of claim: 8. Further taught by combination and specifically by Conway, the method of claim 8 further comprising after step (a), determining if a status of variables selected from the group consisting of links and paths have changed since a previous update to assign the policy decision (In a second embodiment of the invention a system utilizing the method is presented for continuously monitoring the grade of service and offered traffic at gateways (to translate protocol) in an internet protocol telecom network supporting voice over internet protocol, column: 3, lines: 30-32; counters are used to calculate the capacity: In order to make use of the counters to calculate traffic statistics, the counters are polled periodically (to poll the information and defining the value for the given time) using a Simple Network Management Protocol (SNMP) based network management system. Letting CT (i, t) be defined as the value of "dialCtlPeerStats-ConnectTime" for dial peer i at a time t and SC (i, t) as the value of "dialCtlPeerStats-SuccessCalls" for dial peer i at time t, the following gateway performance parameters are then estimated using the polled values of CT (i, t) and SC (i, t): column: 5, lines: 46-53).

Claims 3-4, 6, 7, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Conway (US7054308 B1)** in view of **Yokoyama et al. (US 6324166)** and further in view of **Burst (US 7088677 B1).**

Consider **claim: 3** (Original), Yokoyama et al. as modified by Conway discloses the method of claim: 2. But is generally silent about the method when a second party receiving the new voice call is checked for proper identification and registration in a network transmitting the new voice call. However in the same field of endeavor, Burst discloses the method wherein a second party receiving the new voice call is checked for proper identification and registration in a network transmitting the new voice call (The media gateway processor 402 communicates with the signaling gateway 212 to establish new calls across the IP network, column: 11, lines: 63-65. Additionally the media gateway 202 also includes a receiver (RCV) 418. When the receiver 418 receives packets, it forwards the packets to the media gateway processor 402, column: 12, lines: 16-19; this media gateway processor also includes a congestion state table 403. The table 403 stores the current or recent congestion state of the network. The media gateway processor 402 utilizes this information in performing CAC, column: 12, lines: 1-3. If the decision is to admit (using connection admission control policy) new calls the media gateway processor 402 begins admitting new calls until the algorithm processor 420 signals that new calls should be denied, column: 12, lines: 29-32;)

There for it would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate a method that comprises the steps of periodically polling the information base for traffic statistics, and use that polling

information and estimating the call, as well as the offered traffic, for Voice over Internet Protocol (VoIP) calls at a Public Switched Telephone Network-Internet Protocol (PSTN-IP) network gateway as taught by Yokoyama and Conway in the method of Burst for using the connection admission control- CAC, capable of communicating to the network devices such as router and switches for forwarding packets within network and using algorithm processor to allow or deny new calls.

Consider **claim: 4** (Currently amended), Yokoyama et al. as modified by Conway discloses the method of claim 1 but fails to teach wherein if the priority level of an the existing call being entertained by a second party is lower than the priority level of the new voice call being initiated by a first party, and a preemption message is sent to the second party. However in the same field of endeavor, Burst discloses wherein if the priority level of an the.existing call being entertained by a second party is lower than the priority level of the new voice call being initiated by a first party a preemption message is sent to the second party (When a customer connected to a local switch 104a calls a customer connected to a second local switch 104b, the call may be directed from the calling party's local switch 104a through the tandem 108 to the called party's local switch 104b as shown in FIG. 1 by the dotted line. In a conventional PSTN network, when the network is too busy to complete a call, the calling party's local switch 104a performs connection admission control (CAC) by sending the originating terminal, telephone 102-a, and a busy signal. The caller knows this busy signal to mean to try the call again later when the network may not be busy, column: 10, lines: 11-15; The

Per Hop Behavior- PHB is a forwarding behavior that represents queuing and servicing disciplines in the routers and PHB used with immediate forwarding flag setting, which should be mapped to a queue served by a preemptive scheduler. PHB provide a means of allocating bandwidth and buffers according to the relative requirements of the packets being transferred across the network, column: 11, lines: 37-42).

Consider **claim: 6** (New), Yokoyama et al. as modified by Conway and Burst discloses the method of claim: 4. Further taught by combination and specifically by Yokoyama et al. wherein the second party terminates the existing call and the decision policy is invoked ((When fresh call arrives, the call admission control takes control of admission of that call, col: 8, lines: 42-45,) on the new voice call to determine its connection status to the second party (Maximum number of new call is stored as number of calls N (k, j), then loop steps with respect to calls of classes 1 to K for new incoming calls and compared with each class. If the compared class is full, then judgment in next class is executed, col: 8, lines: 48-55).

Consider **claim: 7** (New), Yokoyama et al. as modified by Conway and Burst discloses the method of claim: 4. Further taught by combination and specifically by Yokoyama et al. wherein if the priority of the existing call is higher than the priority of the new voice call, the new voice call is rejected (When fresh call arrives, the call admission control is done in such a way that a fresh call is accepted if the existing calls in progress

are less than the designed maximum number in the process otherwise the fresh call is rejected, col: 8, lines: 42-45).

Consider **claim: 10** (New), and as applied to claim: 1, Yokoyama et al. as modified by Conway discloses the method of claim: 1 except wherein the policy decision includes sub-decisions of never blocking new voice calls having at least a highest relative priority, blocking a first percentage of new voice calls when a system link utilization exceeds a first percentage of system capacity for calls of an intermediate relative priority and blocking a second percentage of new voice calls when link utilization exceeds a second percentage of system capacity for calls of a low relative priority level. However in the same field of endeavor, Burst discloses the method, wherein the policy decision includes sub-decisions of never blocking new voice calls having at least a highest relative priority (The media gateway classifies the packets, setting the priority to the highest priority in the network. For example, the media gateway may used Differentiated Services (DiffServ) and set various DS code points to classify the packets, column: 6, lines: 57-60; DiffServ code points that is a low priority FEC. The data, which requires the QoS, is placed in the high priority FEC which never can be blocked, column: 5, lines: 38-39), blocking a first percentage of new voice calls when a system link utilization exceeds a first percentage of system capacity for calls of an intermediate relative priority and blocking a second percentage of new voice calls when link utilization exceeds a second percentage of system capacity for calls of a low relative priority level (The processor measures the minimum practical delay by utilizing a

high-priority control packet. The processor then compares the calculated threshold delay with the actual delay experienced by bearer packets, which are transmitted using a lower priority than the priority assigned to the control packets. If the bearer packet delay exceeds the threshold delay, the communications network is congested. In one embodiment, the media gateway rejects communications request when the network is congested. In another embodiment, the media gateway reroutes the calls over an alternative communications means, column: 8, lines: 38-39).

Claims 11, 12, 13,14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Conway (US7054308 B1)** in view of **Yokoyama et al. (US 6324166)** and further in view of **Zavalkovsky et al. (US 7027410 B2).**

Consider **claim: 11** (New), Yokoyama et al. as modified by Conway and Burst discloses the method of claim 10 except wherein there are five relative priority levels and the policy decision includes sub-decisions of never blocking new voice calls having highest or second highest relative priority blocking 100% of new voice calls when the system link utilization exceeds 99% of system capacity for calls of third highest relative priority, blocking 100% of calls when link utilization exceeds 97% of system capacity for calls of a fourth highest relative priority level and selecting a sub-decision from the group consisting of blocking 20% of calls when the system link utilization exceeds 90% of system capacity and blocking 100% of new voice calls when link utilization exceeds 95% of system capacity for a fifth highest relative priority level.

However in the same field of endeavor, Zavalkovsky et al. discloses wherein there are five relative priority levels and the policy decision includes sub-decisions of never blocking new voice calls having highest or second highest relative priority (PHBs with immediate forwarding flag set should be mapped to a queue (4-6 queues) served by a preemptive (Pre-emptive calling is when a PBX disconnects a low priority call to connect a high priority call.) scheduler, column: 11, lines: 47-48), blocking 100% of new voice calls when the system link utilization exceeds 99% of system capacity for calls of third highest relative priority, blocking 100% of calls when link utilization exceeds 97% of system capacity for calls of a fourth highest relative priority level and selecting a sub-decision from the group consisting of blocking 20% of calls when the system link utilization exceeds 90% of system capacity and blocking 100% of new voice calls when link utilization exceeds 95% of system capacity for a fifth highest relative priority level. (In block 304, drain sizes and queue sizes are calculated and stored in a weights table. A queue's drain size is the maximum number of bytes that may be drained from the queue in one cycle, column: 12, lines: 29-32).

There for it would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate a method that comprises the steps of periodically polling the information base for traffic statistics, and use that polling information and estimating the call, as well as the offered traffic, for Voice over Internet Protocol (VoIP) calls at a Public Switched Telephone Network-Internet Protocol (PSTN-IP) network gateway as taught by Yokoyama and Conway in the method Burst for rejecting communications request when the network is congested for a low priority class

further modified by Zavalkovsky et al., for maintaining a consistent per hop forwarding behavior and flag set for mapping a queue served by a preemptive calling is when a PBX disconnects a low priority call to connect a high priority call.

Consider **claim: 12** (New), Yokoyama et al. as modified by Conway discloses the method of claim: 1 but generally silent about the decision policy is distributed to one or more call control devices in the network.

However in the same field of endeavor, Zavalkovsky et al., discloses wherein the decision policy is distributed to one or more call control devices in the network (Policy Management Station (making judgment to allow or deny call) 102 is provided as only an example of one mechanism that may be used to define a domain PHB set. Policy Management Station 102 may be configured as a single component or a plurality of different distributed components that are configured to define a domain PHB set for implementing QoS policies within a network. In addition, in certain embodiments, policy servers 106, 110 are coupled to network 128 and may communicate with edge devices 120 and 122 over network 128, column: 7, lines: 37-42).

There for it would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate a method of periodically polling the information base for traffic statistics, and use that polling information and estimating the call, as well as the offered traffic, for Voice over Internet Protocol (VoIP) calls at a Public Switched Telephone Network-Internet Protocol (PSTN-IP) network gateway as taught by Yokoyama and Conway as modified by Zavalkovsky et al., for making judgment to

allow or deny call using a Policy Management Station in the plurality of different distributed components.

Consider **claim: 13** (New), Yokoyama et al. as modified by Conway and Zavalkovsky et al., discloses the method of claim 12. Further taught by combination, and specifically by Zavalkovsky et al., wherein the one or more call control devices are one or more softswitches (The media gateway 202a c communicates with a softswitch 208, which is also known as a call agent, or media gateway controller (a controlling device), via IP network 205 and link 210, column: 11, lines: 5-7).

There for it would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate a method of periodically polling the information base for traffic statistics, and use that polling information and estimating the call, as well as the offered traffic, for Voice over Internet Protocol (VoIP) calls at a Public Switched Telephone Network-Internet Protocol (PSTN-IP) network gateway as taught by Yokoyama and Conway in the method Burst for using a call agent or controlling device also known as a softswitch which can be further modified by Zavalkovsky et al. for making judgment to allow or deny call using a Policy Management Station in the plurality of different distributed components.

Consider **claim: 14** (New), Yokoyama et al. as modified by Conway discloses the method of claim: 1 but generally silent about wherein packets of information that carry

the new voice call may be selectively dropped based upon the relative voice call priority level.

However in the same field of endeavor, Zavalkovsky et al., discloses wherein packets of information that carry the new voice call may be selectively dropped based upon the relative voice call priority level (PHBs with immediate forwarding flag set should be mapped to a queue served by a preemptive (Pre-emptive calling is when a PBX disconnects a low priority call to connect a high priority call.) scheduler, column: 11, lines: 47-48).

There for it would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate a method of periodically polling the information base for traffic statistics, and use that polling information and estimating the call, as well as the offered traffic, for Voice over Internet Protocol (VoIP) calls at a Public Switched Telephone Network-Internet Protocol (PSTN-IP) network gateway as taught by Yokoyama and Conway in the method of Zavalkovsky et al. for using a Policy Management Station in the plurality of different distributed components that can be served by a preemptive scheduler.

Consider **claim: 15** (New), Yokoyama et al. as modified by Conway and Zavalkovsky et al., discloses the method of claim 14. Further taught by combination, and specifically by Zavalkovsky et al., wherein the method further comprising the step of dropping packets of the lowest relative priority level voice calls when a buffer containing voice call data on the network is at a first percentage of total capacity (The Traffic type

field 230 includes a flag that specifies whether the traffic of the behavior aggregate is elastic (level of priority) or not, column: 9,lines: 15-16; The sum of buffer factors assigned to the forwarding classes is 100% (full capacity). Within each forwarding class, the buffer factor specifies the relative drop precedence of the PHBs, column: 9,lines: 1-2).

Consider **claim: 16** (New), Yokoyama et al. as modified by Conway and Zavalkovsky et al., discloses the method of claim 15. Further taught by combination, and specifically by Zavalkovsky et al., wherein the first percentage of total buffer capacity is approximately 50 % (when the PHB set of FIG. 2 is mapped to a 2q1p queue type, both AF11 and AF12 are mapped to queue 2. Queue 2 should have a single threshold positioned at 50% of the queue length. This threshold would than enforce the BUFFER FACTOR relation between AF11 and AF12. If not enough thresholds are available to differentiate between the different PHB within a forwarding class, or if the threshold positions can not be set appropriately, the network administrator should be notified, and the closest approximation should be taken, column: 13,lines: 28-35).

Consider **claim: 17** (New), Yokoyama et al. as modified by Conway and Zavalkovsky et al., discloses the method of claim 14. Further taught by combination, and specifically by Zavalkovsky et al., for further comprising the step of dropping packets from intermediate priority level calls when a buffer containing voice call data on the network is at a second percentage of total capacity (The threshold position within

the queue should be proportional to the buffer factors of each of the service, or alternatively should equal the reserved packets of each of the PHBs, column: 13, lines: 23-25; PHBs with immediate forwarding flag set should be mapped to a queue served by a preemptive (Pre-emptive calling is when a PBX disconnects a low priority call to connect a high priority call.) scheduler, column: 11, lines: 47-48).

Consider **claim: 18** (New), Yokoyama et al. as modified by Conway and Zavalkovsky et al., discloses the method of claim 17. Further taught by combination, and specifically by Zavalkovsky et al., wherein the second percentage of total buffer capacity approximately 75% (The drain size of a given queue is proportional (approximating to ¾ of forwarding factor) to the sum of forwarding factor of all services mapped to this queue in step 1. For each queue type, the queue with the smallest associated forwarding factor is assigned with a drain size of one packet size. All other queues in this queue size get a proportional drain size, according to their forwarding factors, column: 12, lines: 59-63).

Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Conway (US7054308 B1)** in view of **Yokoyama et al. (US 6324166)** and further in view of **Zavalkovsky et al. (US 7027410 B2**) and **IETF Network working group -RFC2597 (http://www.ietf.org/rfc/rfc2597.txt).**

Consider claim: 19, (New), Yokoyama et al. as modified by Conway and Zavalkovsky et al., discloses the method of claim: 14. Conway as modified by Yokoyama et al. and Zavalkovsky et al. is generally silent about the method further comprising the step of dropping packets from the highest relative priority level calls only if a buffer containing voice call data on the network is full.

However in the same field of endeavor, IETF RFC 2597 discloses the method of claim 14 as modified by IETF – RFC 2597 further comprising the step of dropping packets from the highest relative priority level calls only if a buffer containing voice call data on the network is full (In case of congestion (When Network is full), the drop precedence of a packet determines the relative importance of the packet within the AF class. A congested DS node tries to protect packets with a lower drop precedence value (for related class such as AF12 or 13) from being lost by preferably discarding packets with a higher drop precedence value (AF class with high drop precedence value), page: 2, lines: 16-20).

There for it would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate a method that comprises the steps of periodically polling the information base for traffic statistics, and use that polling information and estimating the call, as well as the offered traffic, for Voice over Internet Protocol (VoIP) calls at a Public Switched Telephone Network-Internet Protocol (PSTN-IP) network gateway as taught by Conway in the method of IETF RFC 2597, where within each AF class, an IP packet can be assigned to one of the levels of drop precedence.

Consider **claim: 20**, (New), Yokoyama et al. as modified by Conway and Zavalkovsky et al., discloses the method of claim: 19. Conway as modified by Yokoyama et al. and Zavalkovsky et al. is generally silent about the packets of information are handed in one class of a multi-class system, said one class having a plurality of sub-classes, each sub\-class having a respective packet dropping precedent.

However in the same field of endeavor, IETF RFC 2597 discloses a method, wherein packets of information are handed in one class of a multi-class system, said one class having a plurality of sub-classes, each sub\-class having a respective packet dropping precedent. (Within each AF class IP packets are marked (again by the customer or the provider DS domain) with one of three possible drop precedence values, page: 2, lines: 14-16).

There for it would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate a method that comprises the steps of periodically polling the information base for traffic statistics, and use that polling information and estimating the call, as well as the offered traffic, for Voice over Internet Protocol (VoIP) calls at a Public Switched Telephone Network-Internet Protocol (PSTN-IP) network gateway as taught by Conway in the method of IETF RFC 2597, for using Assured Forwarding PHB, which provides forwarding of IP packets in N independent AF classes. Within each AF class, an IP packet is assigned one of M different levels of drop precedence.

Consider **claim: 21**, (New), Yokoyama et al. as modified by Conway and Zavalkovsky et al., discloses the method of claim: 20. Conway in view of Zavalkovsky discloses the method of claim 20, except wherein said one class is AF1 and said multi-class system is DiffServ.

However in the same field of endeavor, IETF RFC 2597 discloses wherein said one class is AF1 and said multi-class system is DiffServ (Assured Forwarding (AF-where each AF class is in each DS node allocated a certain amount of forwarding resources (buffer space and bandwidth) PHB group is a means for a provider Differentiated Service domain (for different types of traffic supplied by customer) to offer different levels of forwarding assurances for IP packets (on Network) received from a customer DS domain, page: 2, lines: 4-7).

There for it would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate a method that comprises the steps of periodically polling the information base for traffic statistics, and use that polling information and estimating the call, as well as the offered traffic, for Voice over Internet Protocol (VoIP) calls at a Public Switched Telephone Network-Internet Protocol (PSTN-IP) network gateway as taught by Conway in the method of IETF RFC 2597, for using Assured Forwarding PHB, which provides forwarding of IP packets in N independent AF classes. Within each AF class, an IP packet is assigned one of M different levels of drop precedence. Assured Forwarding (AF) PHB group is a means for a provider DS domain to offer different levels of forwarding assurances for IP packets received from a customer DS domain.

Conclusion

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

- Fedyk et al. (US Patent # 7154851) disclose: Application-aware resource reservation in multi-service networks.
- Baj (U.S. Patent # 7,130,273) discloses: QOS testing of a hardware device or a software client.
- Meempat et al. (U.S. Patent # US 6,778,496) discloses: Distributed call admission and load balancing method and apparatus for packet networks.
- LAKKAKORPI, JANI (EP 1347603 A1) discloses: Simple admission control for IP based networks.
- Goodman, Lee (U.S. 7,173,910) discloses: Service level agreements based on objective voice quality testing for voice over IP (VOIP) networks.
- Benco et al. (U.S. PG PUB # US 20060133345 A1) discloses: Method and apparatus for providing multiple simultaneous VOIP call sessions for a single directory number.
- Sundqvist et al. (U.S. PG PUB # 2003/0187986, Application # 10/363628) discloses: Method for, and a topology aware resource manager in an ip-telephony system- Application # 10/363628.
- Wahl et al. (U.S. # 2002/0089985, Application # 09/977280) discloses: Access control unit.

- Wahl, Stefan (U.S. # US 20030103525 A1, Application # 10/285508) discloses: IP platform for advanced multipoint access systems.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ketan Soni whose telephone number is (571) 270-1782. The Examiner can normally be reached on Monday-Thursday from 7:30am to 6:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Vanderpuye, Kenneth can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Ketan Soni

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Aug 08, 2007.

KENNETH VANDERPUYE
SUPERVISORY PATENT EXAMINER